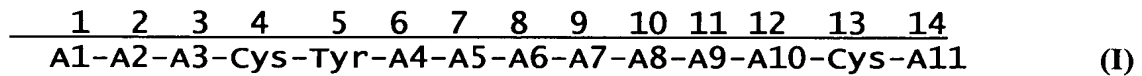


Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (*currently amended*): A peptide according to formula (I) or a salt thereof:



wherein:

amino acid positions are numbered 1-14 and each amino acid may be a D- or L-amino acid;

A1 is an arginine, lysine, ornithine, citrulline, alanine or glutamic acid ~~residue~~ which is derivatized at the α -amino nitrogen with a substituted benzoyl group~~N-terminal~~, or A1 is ~~deleted~~absent;

A2 ~~is represents an~~ arginine or glutamic acid ~~residue when if~~ A1 is an arginine, lysine, ornithine, citrulline, alanine or glutamic acid, ~~residue which may be derivatized at the N-terminal~~, or

if A1 is absent, A2 is represents an arginine or glutamic acid ~~residue which may be~~ derivatized at the α -amino nitrogen with a substituted benzoyl group~~N-terminal if A1 is deleted~~;

A3 ~~is represents an~~ aromatic amino acid ~~residue~~;

A4 ~~and~~, A5 ~~and~~ A9 ~~each independently is represents an~~ arginine, lysine, ornithine, citrulline, alanine or glutamic acid ~~residue~~;

A6 ~~represents a~~ is proline, glycine, ornithine, lysine, alanine, citrulline, arginine or glutamic acid ~~residue~~;

A7 ~~represents a~~ is proline, glycine, ornithine, lysine, alanine, citrulline or arginine ~~residue~~;

A8 ~~is represents a~~ tyrosine, phenylalanine, alanine, naphthylalanine, citrulline or glutamic acid ~~residue~~;

A9 is arginine, lysine, ornithine, citrulline, alanine or glutamic acid;

A10 ~~is represents a~~ citrulline, glutamic acid, arginine or lysine ~~residue~~;

A11 ~~is represents an~~ arginine, glutamic acid, lysine or citrulline ~~residue or a which may be~~ derivatized at C-terminal derivative thereof; and

~~wherein the cysteines at residues of the 4 positions 4 and the 13 position are optionally can form a disulfide-bonded bond, and the amino acid can be either L or D form.~~

2. *(currently amended)*: The peptide according to claim 1, wherein:
A1 is ~~an~~ arginine, citrulline, alanine or glutamic acid ~~residue~~ which is derivatized at the α -amino nitrogen N-terminal, or A1 is ~~absent~~deleted;
A2 ~~is represents an~~ arginine or glutamic acid ~~residue when if~~ A1 is an arginine, citrulline, alanine or glutamic acid ~~residue which may be derivatized at the N-terminal, or~~
If A1 is absent, A2 is represents an arginine or glutamic acid ~~residue which may be~~
derivatized at the α -amino nitrogen with a substituted benzoyl group~~N-terminal if A1 is deleted;~~
A4 ~~represents an~~ is arginine, citrulline, alanine or glutamic acid ~~residue~~;
A5 ~~represents an~~ is arginine, citrulline, alanine, lysine or glutamic acid ~~residue~~;
A6 ~~represents a~~ is lysine, alanine, citrulline or glutamic acid ~~residue~~;
A7 ~~represents a~~ is proline or alanine ~~residue~~;
A8 ~~represents a~~ is tyrosine, alanine or glutamic acid ~~residue~~;
A9 ~~represents an~~ is arginine, citrulline or glutamic acid ~~residue~~;
A10 ~~represents a~~ is citrulline or glutamic acid ~~residue~~; and
A11 is represents an arginine or glutamic acid ~~residue which may be derivatized at the or a C-terminal derivative thereof.~~
3. *(currently amended)*: The peptide according to claim 1, wherein
A1 is ~~[[a]] glutamic acid residue which is derivatized at α -amino nitrogen~~the N-terminal,
or A1 is ~~absent~~deleted.
4. (CANCELLED)
5. *(currently amended)*: The peptide according to claim 1, wherein any one of A2, A4, A6, A8, and A9 is ~~[[a]] glutamic acid residue.~~
6. (CANCELLED)
7. *(currently amended)*: The peptide according to claim 1, wherein A5 ~~represents an~~ is
arginine or glutamic acid ~~residue.~~

8. (*currently amended*): The peptide ~~of or its salt~~ — claim 7 or a salt thereof, wherein A5 ~~represents a~~ is glutamic acid ~~residue~~.

9. (*currently amended*): The peptide according to claim 1, wherein A10 ~~is~~ represents aglutamic acid, arginine or lysine ~~residue~~.

10. (*currently amended*): The peptide according to claim 1, wherein A11 ~~is~~ represents a glutamic acid, lysine or citrulline ~~residue~~.

11 to 13. (CANCELLED)

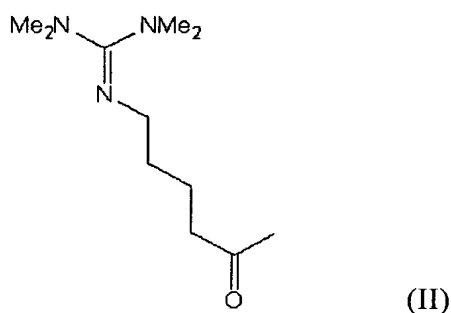
14. (*currently amended*): A peptide having the sequence as set forth in any one of SEQ ID NOs: 11-68, or a salt thereof:

- (1) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH] (SEQ ID NO:11);
- (2) Ac-Arg-Arg-Nal-Cys-Tyr-Arg-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH] (SEQ ID NO:12);
- (3) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH] (SEQ ID NO:13);
- (4) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DLys-Pro-Tyr-Cit-Cit-Cys-Arg[[-OH] (SEQ ID NO:14);
- (5) Ac-Cit-Arg-Nal-Cys-Tyr-Cit-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH] (SEQ ID NO:15);
- (6) Ac-Cit-Arg-Nal-Cys-Tyr-Arg-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH] (SEQ ID NO:16);
- (7) Ac-Arg-Arg-Nal-Cys-Tyr-Arg-Lys-DCit-Pro-Tyr-Cit-Cit-Cys-Arg[[-OH] (SEQ ID NO:17);
- (8) Ac-Cit-Arg-Nal-Cys-Tyr-Arg-Lys-DLys-Pro-Tyr-Cit-Cit-Cys-Arg[[-OH] (SEQ ID NO:18);
- (9) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:19);
- (10) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DLys-Pro-Tyr-Cit-Cit-Cys-Arg-NH₂ (SEQ ID NO:20);
- (11) Ac-Cit-Arg-Nal-Cys-Tyr-Cit-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:21);
- (12) Ac-Cit-Arg-Nal-Cys-Tyr-Arg-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:22);
- (13) Ac-Arg-Arg-Nal-Cys-Tyr-Arg-Lys-DCit-Pro-Tyr-Cit-Cit-Cys-Arg-NH₂ (SEQ ID NO:23);
- (14) Ac-Cit-Arg-Nal-Cys-Tyr-Arg-Lys-DLys-Pro-Tyr-Cit-Cit-Cys-Arg-NH₂ (SEQ ID NO:24);
- (15) [[H-]]DGlu-Arg-Nal-Cys-Tyr-Arg-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH] (SEQ ID NO:25);
- (16) [[H-]]Arg-Glu-Nal-Cys-Tyr-Arg-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH] (SEQ ID NO:26);
- (17) [[H-]]Arg-Arg-Nal-Cys-Tyr-Glu-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH] (SEQ ID NO:27);
- (18) [[H-]]Arg-Arg-Nal-Cys-Tyr-Arg-Glu-DLys-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH] (SEQ ID NO:28);
- (19) [[H-]]Arg-Arg-Nal-Cys-Tyr-Arg-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH] (SEQ ID NO:29);
- (20) [[H-]]Arg-Arg-Nal-Cys-Tyr-Arg-Lys-DLys-Pro-Tyr-Glu-Cit-Cys-Arg[[-OH] (SEQ ID NO:30);
- (21) [[H-]]Arg-Arg-Nal-Cys-Tyr-Arg-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Glu[[-OH]] (SEQ ID NO:31);
- (22) [[H-]]Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:32);
- (23) [[H-]]Arg-Arg-Nal-Cys-Tyr-DGlu-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:33);
- (24) [[H-]]Arg-Arg-Nal-Cys-Tyr-DGlu-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:34);

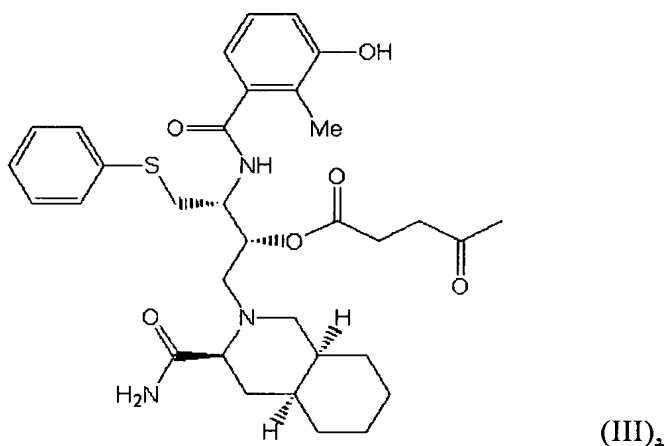
- (25) [[H-]]DGlu-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:35);
- (26) [[H-]]Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-DGlu-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:36);
- (27) [[H-]]Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-DGlu-Cys-Arg-NH₂ (SEQ ID NO:37);
- (28) Ac-DGlu-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:38);
- (29) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-DGlu-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:39);
- (30) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-DGlu-Cys-Arg-NH₂ (SEQ ID NO:40);
- (31) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:41);
- (32) guanyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:42);
- (33) TMguanyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:43);
- (34) TMguanyl-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:44);
- (35) 4F-benzoyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:45);
- (36) 2F-benzoyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:46);
- (37) APA-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:47);
- (38) desamino-R-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:48);
- (39) guanyl-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:49);
- (40) succinyl-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:50);
- (41) glutaryl-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:51);
- (42) deaminoTMG-APA-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:52);
- (43) nelfinaviryl-succinyl-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:53);
- (44) AZT-glutaryl-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:54);
- (45) R-CH₂-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:55);
- (46) [[H-]]Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:56);
- (47) TMguanyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:57);
- (48) ACA-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:58);
- (49) ACA-Arg-Arg-Nal-Cys-Tyr-Arg-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH]] (SEQ ID NO:59);
- (50) [[H-]]Arg-Arg-Nal-Cys-Tyr-Cit-Arg-DLys-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:60);
- (51) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Arg-DLys-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:61);
- (52) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:62);
- (53) Ac-Arg-Arg-Nal-Cys-Tyr-Arg-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:63);
- (54) 4F-benzoyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:64);
- (55) 4F-benzoyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NHMe (SEQ ID NO:65);
- (56) 4F-benzoyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NHEt (SEQ ID NO:66);
- (57) 4F-benzoyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NHiPr (SEQ ID NO:67); or
- (58) 4F-benzoyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-tyramine (SEQ ID NO:68);

wherein,

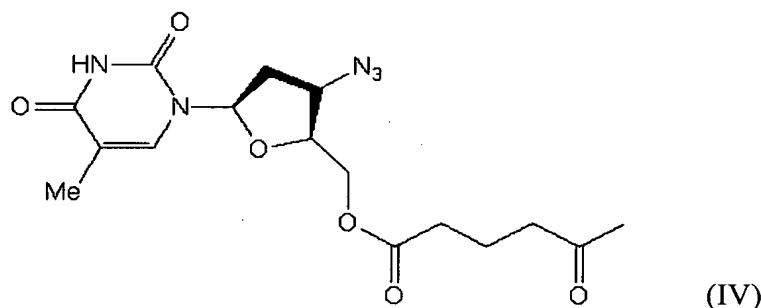
in each of peptides (1)-(58)sequence, the designation symbol appearing before as part of the N-terminal amino acid represents a chemical derivative ~~shows derivatization or non-derivatization~~ of the α -amino nitrogengroup; H ~~shows non-derivatization~~, Ac ~~is~~ shows acetyl group, ~~guanyl shows guanyl group~~, succinyl ~~shows succinyl group~~, glutaryl ~~shows glutaryl group~~, TMguanyl ~~is~~ shows tetra-methyl guanyl group, 2F-benzoyl ~~is~~ shows 2-fluorobenzoyl group, 4F-benzoyl ~~is~~ shows 4-fluorobenzoyl group, APA ~~is~~ shows 5-amino-pentanoyl group, ACA ~~is~~ shows 6-amino-hexanoyl group, desamino-R ~~is~~ shows 2-desamino-arginyl group, deaminoTMG-APA ~~is~~ shows the following formula (II),



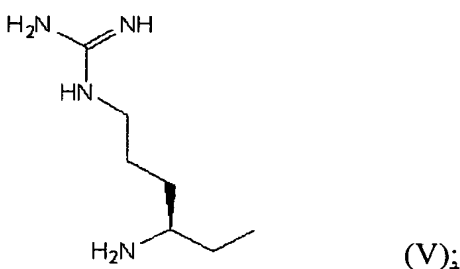
nelfinaviryl-succinyl ~~is~~ shows the following formula (III),



AZT-glutaryl ~~is shows the following~~ formula (IV),



R-CH² ~~is shows the following~~ formula (V)



the amino acids are abbreviated as follows: Arg ~~is shows~~ L-arginine ~~residue~~, Nal ~~is show~~ L-3-(2-naphthyl)alanine ~~residue~~, Cys ~~is shows~~ L-cysteine ~~residue~~, Tyr ~~is shows~~ L-tyrosine ~~residue~~, Cit ~~shows is~~ L-citrulline ~~residue~~, Lys ~~shows is~~ L-lysine ~~residue~~, DLys ~~shows is~~ D-lysine ~~residue~~, Pro ~~shows is~~ L-proline ~~residue~~, DCit ~~shows is~~ D-citrulline ~~residue~~, DGlu ~~shows is~~ D-glutamic acid ~~residue~~, Glu ~~shows is~~ L-glutamic acid ~~residue~~;

the two [[2]]cysteine residues in each peptide are bonded ~~combined~~ by an intramolecular disulfide bond, and

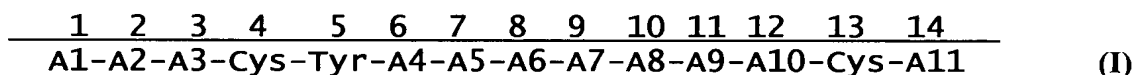
the designation symbol after attached to the right part of C-terminal amino acid shows represents a chemical derivative ~~derivatization or non-derivatization~~ of the terminal carboxyl group, OH ~~shows non-derivatization~~, NH₂ ~~shows~~ represents amidation by an amino group, NHMe ~~shows~~ represents amidation by a methylamino group, NHEt ~~shows~~ represents amidation by an ethylamino group, and NHiPr ~~shows~~ represents amidation by an isopropylamino group; ~~tyramine shows amidation by p-hydroxyphenylethylamino group.~~

15. (currently amended): A pharmaceutical composition comprising:

- (a) a peptide according to claim 1 formula (I) or a salt thereof; and
- (b) a pharmaceutically acceptable carrier or excipient.

16. (CANCELLED)

17. (*currently amended*): A method for preventing or treating cancers or chronic rheumatoid arthritis in a subject in need thereof, comprising administering to the subject a pharmaceutical composition comprising as an active ingredient a therapeutically effective amount of a peptide according to formula (I) or a salt thereof:



wherein:

amino acid positions are numbered 1-14 and each amino acid may be a D- or L-amino acid;
A1 is ~~an~~ arginine, lysine, ornithine, citrulline, alanine or glutamic acid ~~residue~~ or a derivative thereof which is derivatized at the α -amino nitrogen N-terminal, or A1 is absent ~~deleted;~~
A2 ~~is represents an~~ arginine or glutamic acid ~~residue~~ when if A1 is an arginine, lysine, ornithine, citrulline, alanine or glutamic acid, ~~residue or~~
if A1 is absent, which may be derivatized at the N-terminal, or A2 is represents an
arginine or glutamic acid ~~residue~~ which is optionally may be derivatized at the α -amino nitrogen N-terminal if A1 is deleted;
A3 ~~is represents an~~ aromatic amino acid ~~residue~~;
A4 ~~and~~; A5 ~~and~~ A9 each independently ~~are represents an~~ arginine, lysine, ornithine, citrulline, alanine or glutamic acid ~~residue~~;
A6 ~~is represents a~~ proline, glycine, ornithine, lysine, alanine, citrulline, arginine or glutamic acid ~~residue~~;
A7 ~~is represents a~~ proline, glycine, ornithine, lysine, alanine, citrulline or arginine ~~residue~~;
A8 ~~is represents a~~ tyrosine, phenylalanine, alanine, naphthylalanine, citrulline or glutamic acid ~~residue~~;
A9 is arginine, lysine, ornithine, citrulline, alanine or glutamic acid;
A10 ~~is represents a~~ citrulline, glutamic acid, arginine or lysine ~~residue~~;
A11 ~~is represents an~~ arginine, glutamic acid, lysine or citrulline ~~residue or a~~ which may be derivatized at the C-terminal derivative thereof; and
~~wherein the cysteine residues of the at positions 4-position and 11 the 13-position are~~
optionally can form a disulfide-bonded bond, and the amino acid can be either L or D form.

18. (*currently amended*): The method according to claim 17 wherein the cancer is breast cancer or pancreatic cancer.

19 - 22. (CANCELLED)

23. (*previously presented*) The peptide according to claim 14 numbered (35) and (54) having, respectively, the sequence as set forth in SEQ ID NO:45 or in SEQ ID NO:64.

24. (*currently amended*): The pharmaceutical composition according to claim 15, wherein:

A1 is ~~an~~ arginine, citrulline, alanine or glutamic acid ~~residue~~ which is derivatized at the α -amino nitrogen N-terminal, or A1 is deleted;

A2 ~~is represents an~~ arginine or glutamic acid ~~residue if when~~ A1 is ~~[[an]]~~ arginine, citrulline, alanine or glutamic acid ~~residue which may be~~ derivatized at the α -amino nitrogen N-terminal, or

if A1 is absent, A2 is represents an arginine or glutamic acid ~~residue which is~~ may be derivatized at the α -amino nitrogen N-terminal ~~if A1 is deleted~~;

A4 ~~is represents an~~ arginine, citrulline, alanine or glutamic acid ~~residue~~;

A5 ~~is represents an~~ arginine, citrulline, alanine, lysine or glutamic acid ~~residue~~;

A6 ~~is represents a~~ lysine, alanine, citrulline or glutamic acid ~~residue~~;

A7 ~~is represents a~~ proline or alanine ~~residue~~;

A8 ~~is represents a~~ tyrosine, alanine or glutamic acid ~~residue~~;

A9 ~~is represents an~~ arginine, citrulline or glutamic acid residue;

A10 ~~is represents a~~ citrulline or glutamic acid ~~residue~~;

A11 ~~is represents an~~ arginine or glutamic acid ~~residue or a C-terminal derivative thereof which may be~~ derivatized at the C-terminal.

25. (*currently amended*): The pharmaceutical composition according to claim 15, wherein A1 is a glutamic acid ~~residue which is~~ derivatized at the α -amino nitrogen N-terminal, or A1 is ~~absent~~ deleted.

26. (*currently amended*): The pharmaceutical composition according to claim 15, wherein ~~any one of~~ A2, A4, A6, A8 and A9 is a glutamic acid ~~residue~~.

27. (*currently amended*): The pharmaceutical composition according to claim 15, wherein A5 ~~is represents an~~ arginine or glutamic acid ~~residue~~.

28. (*currently amended*): The pharmaceutical composition according to claim 15, wherein A5 ~~represents a~~ is glutamic acid ~~residue~~.

29. (*currently amended*): The pharmaceutical composition according to claim 15, wherein A10 ~~is represents a~~ glutamic acid, arginine or lysine ~~residue~~.

30. (*currently amended*): A pharmaceutical composition according to claim 15, wherein A11 ~~is represents a~~ glutamic acid, lysine or citrulline ~~residue~~.

31. (*previously presented*): A pharmaceutical composition comprising:

(a) a pharmaceutically acceptable carrier or excipient; and

(b) a peptide having the sequence as set forth in any one of SEQ ID NO's: 11-68 or a salt thereof:

- (1) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH]] (SEQ ID NO:11);
- (2) Ac-Arg-Arg-Nal-Cys-Tyr-Arg-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH]] (SEQ ID NO:12);
- (3) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH]] (SEQ ID NO:13);
- (4) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DLys-Pro-Tyr-Cit-Cit-Cys-Arg[[-OH]] (SEQ ID NO:14);
- (5) Ac-Cit-Arg-Nal-Cys-Tyr-Cit-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH]] (SEQ ID NO:15);
- (6) Ac-Cit-Arg-Nal-Cys-Tyr-Arg-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH]] (SEQ ID NO:16);
- (7) Ac-Arg-Arg-Nal-Cys-Tyr-Arg-Lys-DCit-Pro-Tyr-Cit-Cit-Cys-Arg[[-OH]] (SEQ ID NO:17);
- (8) Ac-Cit-Arg-Nal-Cys-Tyr-Arg-Lys-DLys-Pro-Tyr-Cit-Cit-Cys-Arg[[-OH]] (SEQ ID NO:18);
- (9) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:19);
- (10) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DLys-Pro-Tyr-Cit-Cit-Cys-Arg-NH₂ (SEQ ID NO:20);
- (11) Ac-Cit-Arg-Nal-Cys-Tyr-Cit-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:21);
- (12) Ac-Cit-Arg-Nal-Cys-Tyr-Arg-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:22);
- (13) Ac-Arg-Arg-Nal-Cys-Tyr-Arg-Lys-DCit-Pro-Tyr-Cit-Cit-Cys-Arg-NH₂ (SEQ ID NO:23);
- (14) Ac-Cit-Arg-Nal-Cys-Tyr-Arg-Lys-DLys-Pro-Tyr-Cit-Cit-Cys-Arg-NH₂ (SEQ ID NO:24);
- (15) [[H-]]DGlu-Arg-Nal-Cys-Tyr-Arg-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH]] (SEQ ID NO:25);
- (16) [[H-]]Arg-Glu-Nal-Cys-Tyr-Arg-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH]] (SEQ ID NO:26);
- (17) [[H-]]Arg-Arg-Nal-Cys-Tyr-Glu-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH]] (SEQ ID NO:27);
- (18) [[H-]]Arg-Arg-Nal-Cys-Tyr-Arg-Glu-DLys-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH]] (SEQ ID NO:28);
- (19) [[H-]]Arg-Arg-Nal-Cys-Tyr-Arg-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH]] (SEQ ID NO:29);
- (20) [[H-]]Arg-Arg-Nal-Cys-Tyr-Arg-Lys-DLys-Pro-Tyr-Glu-Cit-Cys-Arg[[-OH]] (SEQ ID NO:30);
- (21) [[H-]]Arg-Arg-Nal-Cys-Tyr-Arg-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Glu[[-OH]] (SEQ ID NO:31);

- (22) [[H-]]Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:32);
- (23) [[H-]]Arg-Arg-Nal-Cys-Tyr-DGlu-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:33);
- (24) [[H-]]Arg-Arg-Nal-Cys-Tyr-DGlu-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:34);
- (25) [[H-]]DGlu-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:35);
- (26) [[H-]]Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-DGlu-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:36);
- (27) [[H-]]Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-DGlu-Cys-Arg-NH₂ (SEQ ID NO:37);
- (28) Ac-DGlu-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:38);
- (29) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-DGlu-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:39);
- (30) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-DGlu-Cys-Arg-NH₂ (SEQ ID NO:40);
- (31) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:41);
- (32) guanyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:42);
- (33) TMguanyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:43);
- (34) TMguanyl-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:44);
- (35) 4F-benzoyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:45);
- (36) 2F-benzoyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:46);
- (37) APA-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:47);
- (38) desamino-R-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:48);
- (39) guanyl-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:49);
- (40) succinyl-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:50);
- (41) glutaryl-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:51);
- (42) deaminoTMG-APA-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:52);
- (43) nelfinaviryl-succinyl-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:53);
- (44) AZT-glutaryl-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:54);
- (45) R-CH₂-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:55);
- (46) [[H-]]Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:56);
- (47) TMguanyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:57);
- (48) ACA-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:58);
- (49) ACA-Arg-Arg-Nal-Cys-Tyr-Arg-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg[[OH]] (SEQ ID NO:59);
- (50) [[H-]]Arg-Arg-Nal-Cys-Tyr-Cit-Arg-DLys-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:60);
- (51) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Arg-DLys-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:61);
- (52) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:62);
- (53) Ac-Arg-Arg-Nal-Cys-Tyr-Arg-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:63);

- (54) 4F-benzoyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:64);
- (55) 4F-benzoyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NHMe (SEQ ID NO:65);
- (56) 4F-benzoyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NHEt (SEQ ID NO:66);
- (57) 4F-benzoyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NhiPr (SEQ ID NO:67);
- (58) 4F-benzoyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-tyramine (SEQ ID NO:68).

32. *(previously presented)*: The pharmaceutical composition according to claim 31, comprising [[a]] the peptide numbered (35) and (54) having, respectively, the sequence as set forth in SEQ ID NO:45 or in SEQ ID NO:64.

33. *(previously presented)*: The method according to claim 17, wherein said peptide is a CXCR4 antagonist.

34. *(currently amended)*: The method according to claim 17, wherein the α -amino group of the N-terminal amino acid is derivatized by a substituted benzoyl group:

- ~~A1 is an arginine, citrulline, alanine or glutamic acid residue which is derivatized at the N terminal, or A1 is deleted;~~
- ~~A2 represents an arginine or glutamic acid residue if A1 is an arginine, citrulline, alanine or glutamic acid residue which may be derivatized at the N terminal, or A2 represents an arginine or glutamic acid residue which may be derivatized at the N terminal if A1 is deleted;~~
- ~~A4 represents an arginine, citrulline, alanine or glutamic acid residue;~~
- ~~A5 represents an arginine, citrulline, alanine, lysine or glutamic acid residue;~~
- ~~A6 represents a lysine, alanine, citrulline or glutamic acid residue;~~
- ~~A7 represents a proline or alanine residue;~~
- ~~A8 represents a tyrosine, alanine or glutamic acid residue;~~
- ~~A9 represents an arginine, citrulline or glutamic acid residue;~~
- ~~A10 represents a citrulline or glutamic acid residue;~~
- ~~A11 represents an arginine or glutamic acid residue which may be derivatized at the C terminal.~~

35. *(currently amended)*: The method according to claim 34 ~~[[17]]~~, wherein the substituted benzoyl group is as a 4-fluorobenzoyl or a 2-fluorobenzoyl group ~~A1 is a glutamic acid residue which is derivatized at the N terminal, or A1 is deleted.~~

36 to 38. (CANCELLED)

39. *(currently amended)*: A method for preventing or treating cancers or chronic rheumatoid arthritis in a subject in need thereof, comprising administering to the subject a pharmaceutical composition comprising as an active ingredient a therapeutically effective amount of a peptide having the sequence of which is as set forth in any one of SEQ ID NOs: 11-68, or a salt thereof:

- (1) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH]] (SEQ ID NO:11);
- (2) Ac-Arg-Arg-Nal-Cys-Tyr-Arg-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH]] (SEQ ID NO:12);
- (3) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH]] (SEQ ID NO:13);
- (4) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DLys-Pro-Tyr-Cit-Cit-Cys-Arg[[-OH]] (SEQ ID NO:14);
- (5) Ac-Cit-Arg-Nal-Cys-Tyr-Cit-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH]] (SEQ ID NO:15);
- (6) Ac-Cit-Arg-Nal-Cys-Tyr-Arg-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH]] (SEQ ID NO:16);
- (7) Ac-Arg-Arg-Nal-Cys-Tyr-Arg-Lys-DCit-Pro-Tyr-Cit-Cit-Cys-Arg[[-OH]] (SEQ ID NO:17);
- (8) Ac-Cit-Arg-Nal-Cys-Tyr-Arg-Lys-DLys-Pro-Tyr-Cit-Cit-Cys-Arg[[-OH]] (SEQ ID NO:18);
- (9) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:19);
- (10) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DLys-Pro-Tyr-Cit-Cit-Cys-Arg-NH₂ (SEQ ID NO:20);
- (11) Ac-Cit-Arg-Nal-Cys-Tyr-Cit-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:21);
- (12) Ac-Cit-Arg-Nal-Cys-Tyr-Arg-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:22);
- (13) Ac-Arg-Arg-Nal-Cys-Tyr-Arg-Lys-DCit-Pro-Tyr-Cit-Cit-Cys-Arg-NH₂ (SEQ ID NO:23);
- (14) Ac-Cit-Arg-Nal-Cys-Tyr-Arg-Lys-DLys-Pro-Tyr-Cit-Cit-Cys-Arg-NH₂ (SEQ ID NO:24);
- (15) [[H-]]DGlu-Arg-Nal-Cys-Tyr-Arg-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH]] (SEQ ID NO:25);
- (16) [[H-]]Arg-Glu-Nal-Cys-Tyr-Arg-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH]] (SEQ ID NO:26);
- (17) [[H-]]Arg-Arg-Nal-Cys-Tyr-Glu-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH]] (SEQ ID NO:27);
- (18) [[H-]]Arg-Arg-Nal-Cys-Tyr-Arg-Glu-DLys-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH]] (SEQ ID NO:28);
- (19) [[H-]]Arg-Arg-Nal-Cys-Tyr-Arg-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg[[-OH]] (SEQ ID NO:29);
- (20) [[H-]]Arg-Arg-Nal-Cys-Tyr-Arg-Lys-DLys-Pro-Tyr-Glu-Cit-Cys-Arg[[-OH]] (SEQ ID NO:30);
- (21) [[H-]]Arg-Arg-Nal-Cys-Tyr-Arg-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Glu[[-OH]] (SEQ ID NO:31);
- (22) [[H-]]Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:32);
- (23) [[H-]]Arg-Arg-Nal-Cys-Tyr-DGlu-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:33);
- (24) [[H-]]Arg-Arg-Nal-Cys-Tyr-DGlu-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:34);
- (25) [[H-]]DGlu-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:35);
- (26) [[H-]]Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-DGlu-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:36);
- (27) [[H-]]Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-DGlu-Cys-Arg-NH₂ (SEQ ID NO:37);
- (28) Ac-DGlu-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:38);
- (29) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-DGlu-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:39);
- (30) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-DGlu-Cys-Arg-NH₂ (SEQ ID NO:40);
- (31) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:41);
- (32) guanyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:42);

- (33) TMguanyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:43);
- (34) TMguanyl-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:44);
- (35) 4F-benzoyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:45);
- (36) 2F-benzoyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:46);
- (37) APA-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:47);
- (38) desamino-R-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:48);
- (39) guanyl-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:49);
- (40) succinyl-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:50);
- (41) glutaryl-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:51);
- (42) deaminoTMG-APA-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:52);
- (43) nelfinaviryl-succinyl-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:53);
- (44) AZT-glutaryl-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:54);
- (45) R-CH₂-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:55);
- (46) [[H-]]Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:56);
- (47) TMguanyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:57);
- (48) ACA-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:58);
- (49) ACA-Arg-Arg-Nal-Cys-Tyr-Arg-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg[[OH]] (SEQ ID NO:59);
- (50) [[H-]]Arg-Arg-Nal-Cys-Tyr-Cit-Arg-DLys-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:60);
- (51) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Arg-DLys-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:61);
- (52) Ac-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:62);
- (53) Ac-Arg-Arg-Nal-Cys-Tyr-Arg-Lys-DCit-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:63);
- (54) 4F-benzoyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DLys-Pro-Tyr-Arg-Cit-Cys-Arg-NH₂ (SEQ ID NO:64);
- (55) 4F-benzoyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NHMe (SEQ ID NO:65);
- (56) 4F-benzoyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NHEt (SEQ ID NO:66);
- (57) 4F-benzoyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-NhiPr (SEQ ID NO:67);
- (58) 4F-benzoyl-Arg-Arg-Nal-Cys-Tyr-Cit-Lys-DGlu-Pro-Tyr-Arg-Cit-Cys-Arg-tyramine (SEQ ID NO:68).

40. *(previously presented)*: The method according to claim 39 wherein the sequence of said peptide ~~having the sequence as set forth in~~ is SEQ ID NO:45 or [[in]] SEQ ID NO:64.

41. *(new)*: The method of claim 39 wherein said subject is afflicted with cancer.

42. *(new)*: The method of claim 39 wherein said subject is afflicted with chronic rheumatoid arthritis.

43. *(new)*: The peptide or salt of claim 1, wherein the sequence of said peptide is any one of SEQ ID NO:45, 46, and SEQ ID NOs: 64-68.

44. *(new)*: The pharmaceutical composition of claim 15, wherein the sequence of said peptide is any one of SEQ ID NO:45, SEQ ID NO:46, and SEQ ID NOs:64-68.

45. *(new)*: The method of claim 35, wherein the sequence of said peptide is any one of SEQ ID NO:45, SEQ ID NO:46, and SEQ ID NOs:64-68.